

LEOPARD

Low Earth Orbit Position and Reporting Device

Experiment Description

The Space and Missile Defense Battle Lab (SMDBL) participates in operational exercises and demonstrations ensuring that space-based satellite communications are fully exploited to enhance the warfighter's ability to conduct operations. SMDBL employs and evaluates Low Earth Orbit Position and Reporting Device (LEOPARD) systems to provide the tactical commander with improved situational awareness and command and control of deployed forces.

Benefit to the Warfighter

LEOPARD provides near-real time, two-way, over-the-horizon data communications between tactical users conducting worldwide expeditionary operations and the tactical operations center. LEOPARD provides the ground commander with the ability to track deployed soldiers, as well as receive real-time information from the forward battlespace.

Technical Description

The Low Earth Orbit Position and Reporting Device is a commercial Mobile Satellite Services (MSS) data communications system that has been integrated with existing military equipment to provide rapid, two-way, over-the-horizon data communications. LEOPARD consists of two segments. The soldier segment includes a handheld device, which has a GPS and an MSS handset built in. It is lightweight and rugged, providing a user friendly, portable device that also gives the soldier the ability to send free text messaging up to 200 characters. The Viper Laser Range Finder allows LEOPARD to transmit targeting data. The base station is a laptop computer and an MSS handset. These segments provide the commander with the ability to track and communicate with deployed forces around the world.



Applications

LEOPARD has practical application for a number of activities such as: Surveillance and Reconnaissance, Mine Marking and Reporting, Sensor to Shooter, Position Reporting, Damage Assessment, Operations Other Than War, and Disaster Relief and Fire Fighting support.

Experiments/Demonstrations

- Association of the United States Army conferences
- Joint Services Conference on Professional Ethics 99
- Special Projects '99
- Joint Contingency Force Advanced Warfighting Experiment 00
- Army Transformation Experiment 02/Millennium Challenge 02
- Joint Combat Identification Evaluation Team 02

For more information, please contact:

U.S. Army Space and Missile Defense Command
Public Affairs Office
P.O. Box 1500
Huntsville, AL 35807-3801
Phone: 256-955-3887
Fax: 256-955-1214
Email: webmaster@smdc.army.mil
www.smdc.army.mil

